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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,751	12/20/2000	Tatsuya Anna	SIMTEK5685	6449

7590 03/07/2002
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EXAMINER

GONZALEZ, JULIO C

ART UNIT PAPER NUMBER

2834

DATE MAILED: 03/07/2002

10-11-02

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/742,751

Applicant(s)

ANMA ET AL.

Examiner

Julio C. Gonzalez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3 and 4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/20/00 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 25 June 2002 is: a) ☐ approved b) ☒ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) §. 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The proposed drawing correction filed on 06/25/02 has been disapproved because it is not in the form of a pen-and-ink sketch showing changes in red ink or with the changes otherwise highlighted. See MPEP § 608.02(v).
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: protective coating 25. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the 120° to 140° electrical angle of the magnets set to the rotational axis and the non-magnetized areas between the magnets as disclosed in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, what is meant by the magnets having "alternating pluralities"? What are the pluralities, the poles? The spaces? From the claims, it may seem like if the space is having a 120 to 140 degree separation or are the magnets having the degree of separation?

What is considered "relatively" rotating? Almost moving?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable under Miyao et al (Patent # 4,739,203) in view of Kinoshita.

Miyao et al discloses permanent magnets 1, 2, armature winding 27 (see figures 4, 8, 17) and that the magnetic poles of the magnets have an electrical angle of 120 degrees (column 2, lines 1-4).

However, Miyao does not disclose having non-magnetized areas between the magnets.

On the other hand, Kinoshita discloses for the purpose of improving the performance or motor and generators, a non-magnetized area 16 between the magnets (see figure 2B).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a rotating machine as disclosed by Miyao and to modify the invention by placing non-magnetized areas between the magnets for the purpose of improving the performance or motor and generators as disclosed by Kinoshita.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyao and Kinoshita as applied to claim 1 above, and further in view of Tajima et al (US Patent 6,396,183).

The combined rotating machine discloses all of the elements above. However, combined rotating machine does not disclose having the coils fixed against rotation.

On the other hand, Tajima et al discloses for the purpose of providing an electric machine with small cogging torque, a stator 22 with fixed windings and rotating magnets (see figure 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined rotating machine as disclosed above and to modify the invention by making the magnets rotate for the purpose of providing an electric machine with small cogging torque as disclosed by Tajima et al.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyao and Kinoshita as applied to claim 1 above, and further in view of Tajima et al (US Patent 4,672,253).

The combined rotating machine discloses all of the elements above. However, combined rotating machine does not disclose the electrical machine to be a generator.

On the other hand, Tajima et al discloses for the purpose of reducing cogging torque, an electrical machine that can function as a motor or a generator (see abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined rotating machine as disclosed above and to modify the invention by making the electrical machine function as a generator for the purpose of reducing cogging torque as disclosed by Tajima et al.

Response to Arguments

1. Applicant's arguments with respect to claims 1, 3 and 4 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments filed 06/25/02 have been fully considered but they are not persuasive.

Claim 1 does not seem to specify clearly the scope of the invention. It would seem to one having ordinary skill in the art that the magnet electrical angle (120-140 degrees) is been defined, but also the gap (non-magnetized area) may also be defined with the 120-140 degrees or the spacing of the coils. Respectfully, the prior art was applied base on the best understanding of what the claim may be disclosing. Moreover, the sketch provided on the response sent on 06/25/02 seems to only show a 30 degree rotational angle.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will

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be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

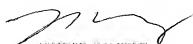
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

September 11, 2002


NESTOR RAMIREZ
SUPERVISOR, PATENT EXAMINER
RECEIVED SEP 11 2002